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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,298	07/17/2003	Albert Rabinovich	EH-10875 (03-261)	2225
34704	7590	11/07/2005	EXAMINER	
BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510			KASTLER, SCOTT R	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,298	RABINOVICH, ALBERT	
	Examiner	Art Unit	
	Scott Kastler	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 13-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/30/05, 7/17/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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Election/Restrictions

Applicant's election with traverse of claims 1-12 and 26-28 (Group I) in the reply filed on 10/4/2005 is acknowledged. The traversal is on the ground(s) that the search of the two groups is expected by the applicant to overlap. This is not found persuasive because as stated in the restriction requirement, the two groups represent two distinct inventions properly restrictable.

The requirement is still deemed proper and is therefore made FINAL.

Claims 13-25 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/4/2005.

Means Plus Function Language in the Claims

The following Means-Plus-Function terms appear in the instant claims:

1. "means for adding" Claim 10, which is not clearly defined in the instant specification and therefore has been interpreted as meaning any means capable of adding liquid droplets to the cooling gas.

2. "means for moving" Claim 26, which is defined in paragraph [0070] of the instant specification for example.

Claim Objections

Claims 3-5 8 and 12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is

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required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The above claims do not fairly further limit independent apparatus claim 1 because the above claims recite only limitations dealing with the manner or method in which the claimed apparatus is to be employed (either the type of coolant to be employed with respect to claims 3-5, or the operation in which the apparatus is to be employed in with respect to claims 8 and 12). It has been well settled that the manner or method in which an apparatus is to be employed cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114 and *In re Casey*, 152 USPQ 235.

Claims 4, 5, 8, 11 and 12 are objected to because of the following informalities: The above claims are informal in that the following terms lack clear antecedent basis:

1. "said water" in claims 4 and 5.
2. "said apparatus impingement" in claims 8 and 12
3. "the forging" in claim 11.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunge in view of Wang. Bunge teaches an apparatus for the cooling of forged workpieces (22)

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including a support formed of a plurality of vertically extending rods, and including cooling means comprised of tubes movable with respect to the workpiece to be cooled during cooling (see the embodiment of figures 1-3 for example as well as the claims for example), thereby showing all aspects of the above claims except the provision of means for delivering at least two coolants, one of which is gaseous at ambient temperatures and another which is liquid at ambient temperatures. Wang teaches that in cooling workpieces, it was known in the art at the time the invention was made to replace air cooling or quenching systems of the type employed by Bunge with systems employing both gaseous and liquid coolants where liquid droplets are entrained in the gaseous coolant in order to improve the quenching efficiency of the apparatus (see col. 1 line 7 to col. 2 line 34 for example). Because improved cooling efficiency would also be desirable in Bunge, motivation to replace the air cooling of Bunge, with the combined gas and liquid cooling system of Wang, which is designed as an improvement over air cooling systems as taught by Bunge, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

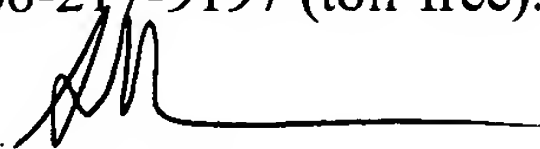
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler
Primary Examiner
Art Unit 1742

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